Shaw Environmental, Inc.

312 Directors Drive
Knoxville, TN 37923
865.690.3211
Fax 865.690.3626

Shaw® Shaw Environmental, Inc.

August 16, 2005

SHAW-MC-CK10-0977
Project No. 796887

Mr. Lee Coker
U.S. Army Corps of Engineers, Mobile District
Attn: EN-GE/Lee Coker
109 St. Joseph Street
Mobile, Alabama 36602

Contract: **DACA21-96-D-0018, Task Order CK10**
Fort McClellan, Alabama

Subject: **Sample Results for Former AST at Range 13, Parcel 176(7)**

Dear Mr. Coker:

This letter report presents the results of soil sampling conducted by Shaw at the Former Aboveground Storage Tank (AST) at Range 13, Parcel 176(7). Parcel 176(7) was the former location of a 500-gallon heating oil AST. The approximately 40-square-foot parcel lies within the boundary of the Anniston Eastern Bypass Corridor (Figure 1). Significant land clearing and road construction has occurred in the vicinity of the former AST site and has severely altered the landscape. This parcel was originally included in the Draft RI Report for the Iron Mountain Road Ranges issued in April 2004. However, sampling was not performed to assess potential contamination associated with the former AST.

In February 2005 Shaw collected four surface soil samples immediately west of Lucerne Drive in the area formerly occupied by the AST (Figure 2). The samples were analyzed for TAL metals, volatile organic compounds (VOC), and semivolatile organic compounds (SVOC) at EMAX Laboratories, Inc. These data are provided to facilitate property transfer of Parcel 176(7). The results will also be presented in the Draft-Final RI Report.

Summary of Analytical Results

Several metals and a total of nine VOCs were detected in the samples (Table 1). SVOCs were not detected in any of the samples. To evaluate the presence or absence of contamination, the analytical results were compared to human health site-specific screening levels (SSSL), ecological screening values (ESV), and metals background screening values developed for FTMC. Detectable VOC concentrations in the samples ranged from 0.00067 to 0.39 mg/kg and all results were below SSSLs and ESVs. Excluding one "B"-flagged antimony result present as a laboratory artifact, the concentrations of seven metals exceeded SSSLs and/or ESVs but were

below their respective background values, except for lead in one sample. Lead (123 mg/kg) exceeded its ESV (50 mg/kg) and background (40 mg/kg) at sample location HR-176-SS01. However, the concentration of lead at this sample location was well below its residential SSSL (400 mg/kg) and its industrial SSSL (880 mg/kg). All other lead results were below their residential (and industrial) SSSL values, ESV, and background.

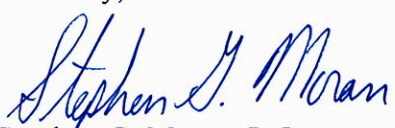
Because the site will be used as highway the industrial SSSL is the most appropriate screening value. The industrial cleanup level of 880 mg/kg was the established remedial goal for prior soil removal activities performed in the Iron Mountain Road Ranges on property located in the Eastern Bypass Corridor.

Recommendation

Based on the analytical results of the surface soil samples collected and the intended highway reuse of the property, Shaw recommends "No Further Action" for the former AST at Range 13.

At your request, I have distributed copies of this submittal as indicated below. A PDF version of this submittal is also provided for your records. If you have questions, or need further information, please contact me at (865) 694-7361.

Sincerely,



Stephen G. Moran, P.G.
Project Manager

Attachments

Distribution: Lisa Holstein, FTMC (7 copies; 2 CDs)
Shana Decker, ADEM (2 copies, 1 CD)
Doyle Brittain, EPA Region 4 (1 copy; 1 CD)
Miki Schneider, JPA (1 copy)
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Table 1

Surface Soil Analytical Results
AST at Range 13, Parcel 176(7)
Fort McClellan, Alabama

Sample Location					HR-176-SS01					HR-176-SS02					HR-176-SS03					HR-176-SS04				
Sample No.					SQ0001					SQ0002					SQ0003					SQ0004				
Sample Date					17-FEB-05					17-FEB-05					17-FEB-05					17-FEB-05				
Sample Depth (feet)					0- 1					0- 1					0- 1					0- 1				
Parameter	Units	BKG[a]	SSSL[b]	ESV[b]	Result	VQ	BKG	SSSL	ESV	Result	VQ	BKG	SSSL	ESV	Result	VQ	BKG	SSSL	ESV	Result	VQ	BKG	SSSL	ESV
METALS																								
Aluminum	mg/kg	1.63E+04	7.80E+03	5.00E+01	5.70E+03				YES	5.05E+03				YES	5.69E+03				YES	7.32E+03				YES
Antimony	mg/kg	1.99E+00	3.11E+00	3.50E+00	2.33E+00	B	YES			ND					3.37E+00	B	YES	YES		ND				
Arsenic	mg/kg	1.37E+01	4.26E-01	1.00E+01	3.86E+00			YES		2.91E+00			YES		2.63E+00			YES		2.45E+00			YES	
Barium	mg/kg	1.24E+02	5.47E+02	1.65E+02	3.10E+01					3.41E+01					3.92E+01					4.22E+01				
Beryllium	mg/kg	8.00E-01	9.60E+00	1.10E+00	3.40E-01	J				3.81E-01	J				3.94E-01	J				4.47E-01	J			
Calcium	mg/kg	1.72E+03	NA	NA	1.63E+03					7.25E+03		YES			8.17E+02					1.09E+03				
Chromium	mg/kg	3.70E+01	2.32E+01	4.00E-01	9.07E+00				YES	6.57E+00				YES	6.13E+00				YES	8.35E+00				YES
Cobalt	mg/kg	1.52E+01	4.68E+02	2.00E+01	2.47E+00					3.14E+00					3.84E+00					4.57E+00				
Copper	mg/kg	1.27E+01	3.13E+02	4.00E+01	2.90E+01		YES			7.88E+00					1.36E+01		YES			1.05E+01				
Iron	mg/kg	3.42E+04	2.34E+03	2.00E+02	8.29E+03			YES	YES	6.90E+03			YES	YES	6.01E+03			YES	YES	8.56E+03			YES	YES
Lead	mg/kg	4.01E+01	4.00E+02	5.00E+01	1.23E+02		YES		YES	1.61E+01					1.40E+01					1.51E+01				
Magnesium	mg/kg	1.03E+03	NA	4.40E+05	8.70E+02					2.40E+03		YES			3.44E+02					5.94E+02				
Manganese	mg/kg	1.58E+03	3.63E+02	1.00E+02	1.96E+02				YES	2.55E+02				YES	1.99E+02				YES	2.89E+02				YES
Mercury	mg/kg	8.00E-02	2.33E+00	1.00E-01	ND					ND					3.01E-02	J				6.06E-02	J			
Nickel	mg/kg	1.03E+01	1.54E+02	3.00E+01	2.84E+00					2.71E+00					2.24E+00	J				4.62E+00				
Potassium	mg/kg	8.00E+02	NA	NA	2.44E+02	J				2.66E+02	J				2.28E+02	J				2.99E+02	J			
Selenium	mg/kg	4.80E-01	3.91E+01	8.10E-01	ND					ND					ND					6.81E-01	J	YES		
Sodium	mg/kg	6.34E+02	NA	NA	5.03E+01	J				6.19E+01	J				7.30E+01	J				7.28E+01	J			
Vanadium	mg/kg	5.88E+01	5.31E+01	2.00E+00	1.09E+01				YES	9.31E+00				YES	7.92E+00				YES	1.10E+01				YES
Zinc	mg/kg	4.06E+01	2.34E+03	5.00E+01	3.24E+01					2.40E+01					2.37E+01					2.00E+01				
VOLATILE ORGANIC COMPOUNDS																								
1,2,4-Trimethylbenzene	mg/kg	NA	3.88E+02	1.00E-01	ND					6.70E-04	J				ND					ND				
1,2-Dimethylbenzene	mg/kg	NA	1.55E+04	5.00E-02	ND					1.50E-03	J				ND					ND				
2-Butanone	mg/kg	NA	4.66E+03	8.96E+01	1.90E-02	J				2.20E-02	J				2.40E-02					1.80E-02	J			
Acetone	mg/kg	NA	7.76E+02	2.50E+00	2.90E-01					3.20E-01					3.90E-01	J				3.30E-01	J			
Benzene	mg/kg	NA	2.17E+01	5.00E-02	1.10E-03	J				1.50E-03	J				1.00E-03	J				8.80E-04	J			
Carbon disulfide	mg/kg	NA	7.77E+02	9.00E-02	ND					2.70E-03	J				ND					ND				
Methylene chloride	mg/kg	NA	8.41E+01	2.00E+00	4.50E-03	B				5.50E-03	B				6.50E-03	B				2.00E-03	B			
Toluene	mg/kg	NA	1.55E+03	5.00E-02	ND					1.10E-03	J				ND					ND				
m,p-Xylenes	mg/kg	NA	1.55E+04	5.00E-02	ND					1.70E-03	J				ND					ND				

Analyses performed using U.S. Environmental Protection Agency (EPA) SW-846 analytical methods.

[a] BKG - Background. Concentration listed is two times (2x) the arithmetic mean of background metals concentration given in SAIC, 1998, *Final Background Metals Survey Report, Fort McClellan, Alabama*, July.

[b] Residential human health site-specific screening level (SSSL) and ecological screening value (ESV) as given in IT, 2000, *Health and Ecological Screening Values and PAH Background Summary Report, Fort McClellan, Calhoun County, Alabama*, July.

B - Analyte detected in laboratory or field blank at concentration greater than the reporting limit.

J - Compound was positively identified; reported value is an estimated concentration.

mg/kg - Milligrams per kilogram.

NA - Not available.

ND - Not detected.

VQ - Data validation qualifier.

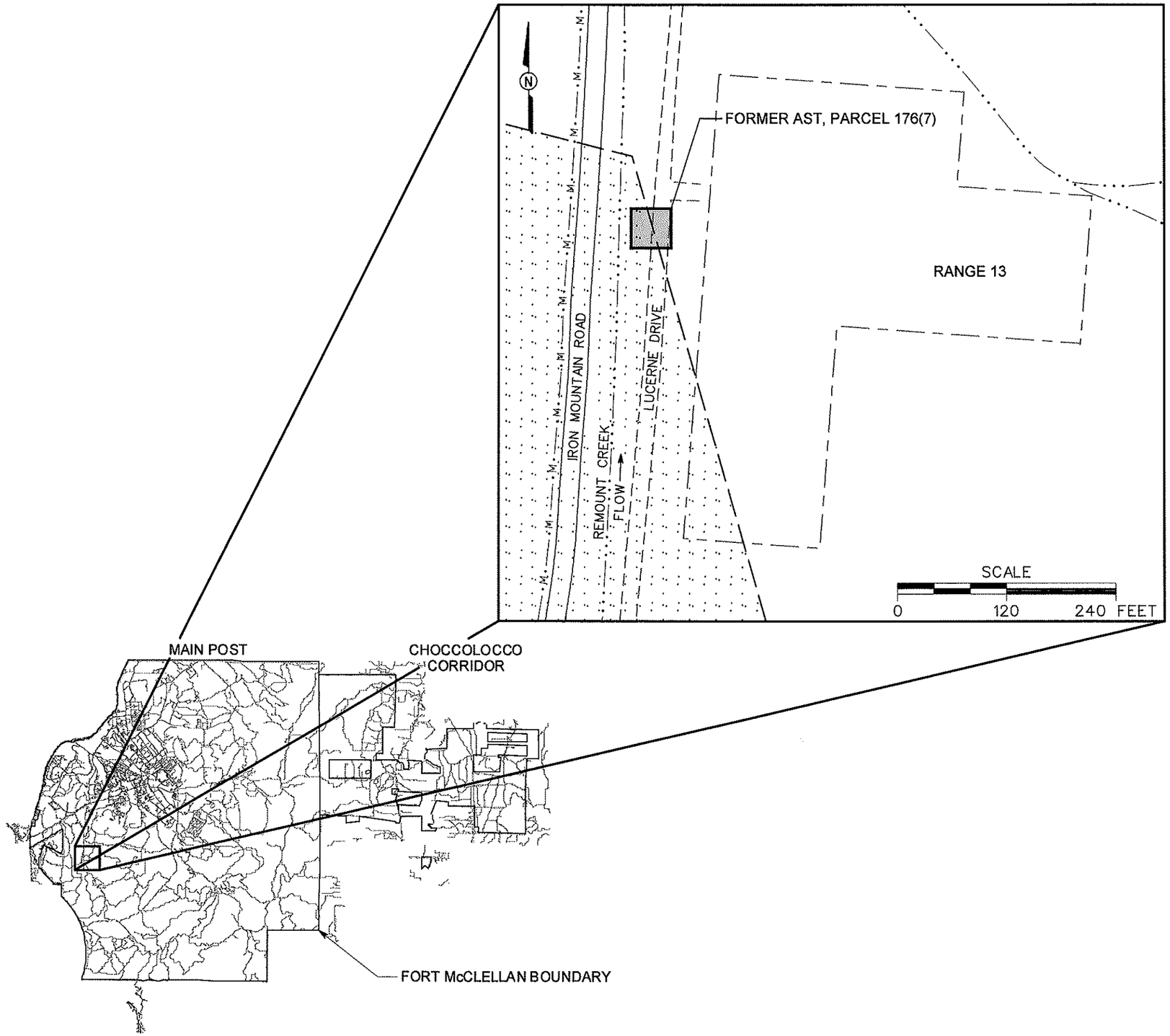

FIGURE 1
SITE LOCATION MAP
AST AT RANGE 13, PARCEL 176(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

Shaw Shaw Environmental, Inc.

DATE LAST REV.:		INITIATOR: G. SISCO	DWG. NO.: ...\796887es.918
DRAWN BY:		PROJ. MGR.: S. MORAN	PROJ. NO.: 796887
STARTING DATE: 08/03/05	DRAFT. CHCK. BY:		
DRAWN BY: D. BOMAR	ENGR. CHCK. BY:		

8/4/2005 10:57:06 AM
c:\cadd\design\796887es.918
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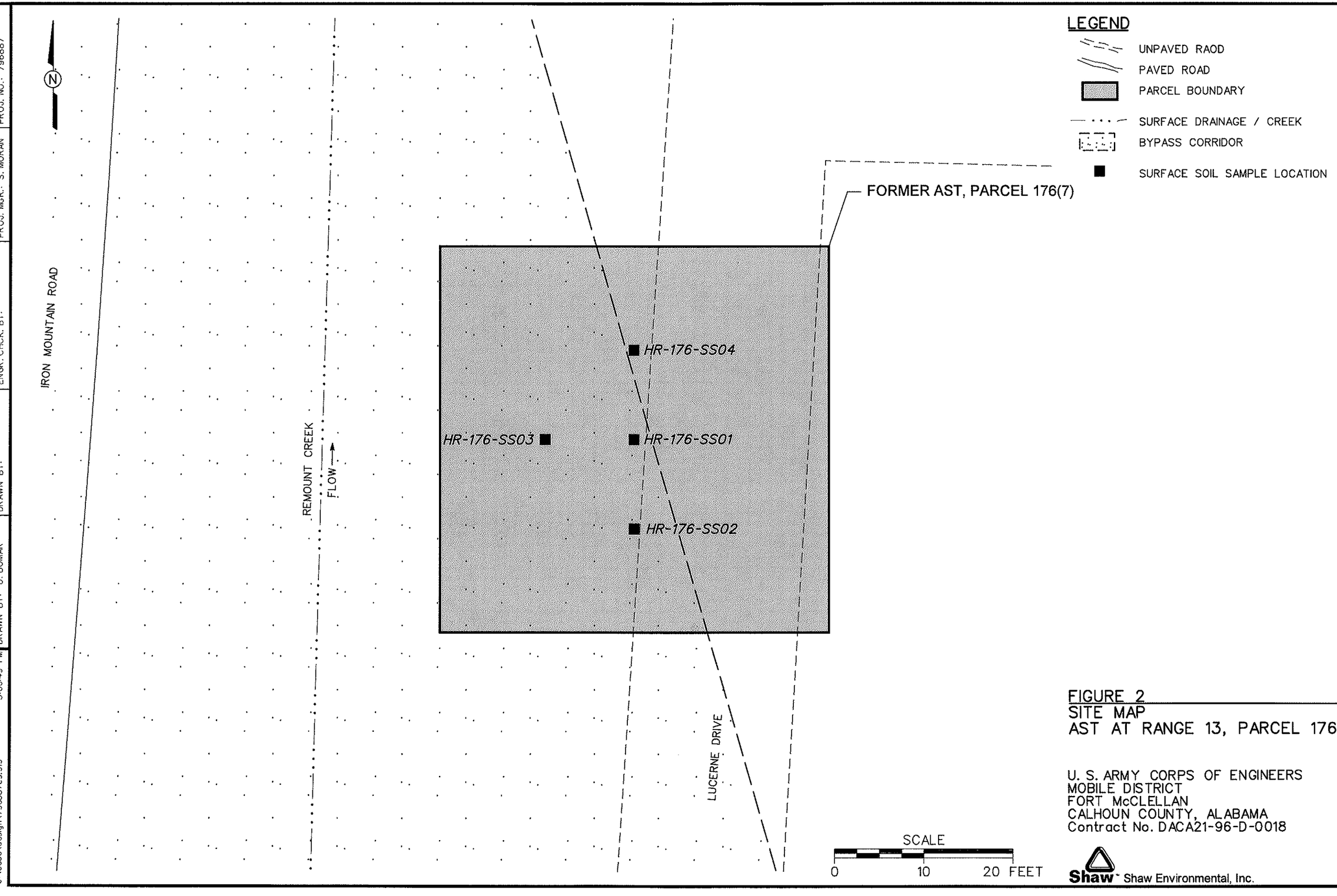

FIGURE 2
SITE MAP
AST AT RANGE 13, PARCEL 176(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

Shaw™ Shaw Environmental, Inc.

DRAFT. CHCK. BY:
ENGR. CHCK. BY:
INITIATOR: G. SISCO
PROJ. MGR.: S. MORAN
DWG. NO.: ...\796887es.919
PROJ. NO.: 796887
DATE LAST REV.:
DRAWN BY:
STARTING DATE: 08/03/05
DRAWN BY: D. BOMAR
8/10/2005
5:06:49 PM
dbomar
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